Worksheet 2 Types of Operating System

Task 1

1. (a) In mobile operating systems, why do you think underlying hardware is handled by a low level proprietary OS, made and owned by the hardware manufacturer, and the user interface and applications are handled separately?

(b) Why do mobile devices such as smartphones and tablets require a different operating system from a desktop computer?

Task 2

2. (a) Match up the statements with the correct type of Operating System(s) that they relate to. Some statements may relate to more than one type of operating system.

- Distributed
- Embedded
- Multi-tasking
- Multi-user
- Real-time

A mainframe computer's processing power is used by lots of individual terminals	A single job can be processed using the resources of multiple computers
Processor time is scheduled according to an algorithm	Inputs must be acted upon very quickly by the operating system
A household appliance might use this type of Operating System	A home desktop computer might have this type of operating system
Hardware redundancy and fail safes are required if the system is safety-critical	This type of OS gives the illusion of working with a single processor, when in reality jobs are coordinated across multiple computers

(b) Write down two more statements which relate to a type of operating system. Either in a group or with a partner, see if another student can work out which type of operating system your statement relates to.